IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Breese et al.

Serial No. 10/062,369

Serial No. 10/062,369

Filed: January 31, 2002

For: Method and System for Performance Reporting in a Network Environment

Serial No. 10/062,369

Examiner: Pollack, Melvin H.

Customer No. 50170

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Serial No. 1

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ATTENTION: Board of Patent Appeals and Interferences

APPELLANTS' BRIEF (37 C.F.R. § 41.37)

This Appeal Brief is in furtherance of the Notice of Appeal filed June 13, 2006 (37 C.F.R. § 41.31).

The fees required under § 41.20(b)(2), and any required petition for extension of time for filing this brief and fees therefore, are dealt with in the accompanying Transmittal of Appeal Brief.

I. Real Party in Interest

The real party in interest in this appeal is the following party: International Business Machines Corporation.

II. Related Appeals and Interferences

With respect to other appeals and interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

III. Status of Claims

The status of the claims involved in this proceeding is as follows:

- 1. Claims canceled: 11, 14, 25, 28, 40, 43, 55, and 58
- 2. Claims withdrawing from consideration but not canceled: NONE
- 3. Claims pending: 1-10, 12-13, 15-24, 26-27, 29-39, 41-42, 44-54, 56-57, and 59-64
- 4. Claims allowed: NONE
- 5. Claims rejected: 1-10, 12-13, 15-24, 26-27, 29-39, 41-42, 44-54, 56-57, and 59-64

The claims on appeal are: claims 1-10, 12-13, 15-24, 26-27, 29-39, 41-42, 44-54, 56-57, and 59-64.

IV. Status of Amendments

No amendments to the application were filed subsequent to mailing of the Final Office Action.

V. Summary of Claimed Subject Matter

The present invention provides a mechanism for performance monitoring in a network environment. With this mechanism, data is collected from a plurality of probes, including at least one local probe (221) and at least one remote probe (235). The data may be reported (241, 242), by a report generator (231, 232), for example, by reporting a first subset of data that originates from a local probe (221) and a second subset of data that originates from a remote probe (235), a similar reporting format being used for reporting the first subset of data and the second subset of data such that comparison of the data may be facilitated (page 2, lines 20-28).

The at least one local probe (221) and at least one remote probe (235) operate based on a script that is deployed to these probes. Thus, both the at least one local probe (221) and the at least one remote probe (235) function using the same script (page 7, lines 14-21). The script comprises a set of transactions that are frequently performed by end users (page 11, lines 29-30). These transactions are executed by the probes (221, 235) to thereby provide an end-to-end measurement of an organization's internal and external applications (page 12, lines 10-15).

Based on the results obtained from the execution of the script by the at least one local probe (221) and the at least one remote probe (235), a report (241, 242) of the results may be generated. The report (241, 242) may have transaction entries for each transaction step in the script (see Figures 3A and 3B). For example, as shown in Figures 3A and 3B, columns 303-311 may be provided in the report for providing performance information for each transaction step in the script (page 13, lines 7-9). Problems with performance may be determined based on whether response times exceed a pre-determined threshold, which may be obtained, for example, from a service level agreement. These problems may be identified in the report through special coloring, shading, error messages, or the like (page 13, lines 24-27; page 14, lines 7-16).

VI. Grounds of Rejection to be Reviewed on Appeal

The grounds of rejection to be reviewed on appeal are as follows:

1) claims 1, 3-7, 9, 12, 16-17, 19-21, 23, 26, 29-30, 32-36, 38, 41, 45, 47-51, 53, and 56 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hershey et al. (U.S.

Patent No. 5,793,753) in view of Chandra et al. (U.S. Patent No. 6,397,359);

- 2) claims 2, 8, 10, 13, 15, 18, 22, 24, 27, 31, 37, 39, 42, 44, 46, 52, 54, 57, and 59 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hershey et al. in view of Chandra et al., and further in view of Schwaller et al. (U.S. Patent No. 6,901,442); and
- 3) claims 60-64 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hershey et al., Chandra et al., and Schwaller et al., and further in view of Wlaschin et al. (U.S. Patent No. 6,163,775).

VII. Argument

A. Rejection under 35 U.S.C. § 103(a) based on Hershey and Chandra

The Final Office Action rejects claims 1, 3-7, 9, 12, 16, 17, 19-21, 23, 26, 29, 30, 32-36, 38, 41, 45, 47-51, 53, and 56 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hershey et al. (U.S. Patent No. 5,793,753) in view of Chandra et al. (U.S. Patent No. 6,397,359). This rejection is respectfully traversed.

Claim 1, which is representative of the other rejected independent claims 30 and 45 with regard to similarly recited subject matter, reads as follows:

1. A method for communicating performance information, said method comprising:

configuring a plurality of probes to execute a <u>script for performing a transaction</u> between a client computing device and a server computing device, wherein the script comprises <u>a plurality of transaction steps for performing the transaction</u>;

collecting data from the plurality of probes, including at least one local probe and at least one remote probe, wherein the collected data is data representative of a performance of the transaction steps of the script executed by the plurality of probes; and

reporting said data, wherein reporting said data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of the at least one local probe or the at least one remote probe. (emphasis added)

Neither Hershey nor Chandra, either alone or in combination, teach or suggest the

features of claim 1 emphasized above. Hershey is directed to a system for management of a telecommunications network. Hershey teaches the use of a programmable probe that is connected to a network device for monitoring data transfer activity on the network and collecting selected data relating to one or more relevant functions. The probe may be programmed to effect collection of data relative to a selected function parameter. The collected function parameter data may be received from the probe and stored. A data output device may be provided for outputting the parameter data to a user. Furthermore, Hershey teaches comparing the parameter data to a reference value and providing an indication when the parameter data deviates from the reference value by more than a preselected threshold (column 2, lines 11-55).

Hershey, however, does not teach programming a probe with a script for performing a transaction between a client device and a server device, wherein the script includes a plurality of transaction steps. To the contrary, Hershey only teaches being able to program the probe to collect data for particular functions. Hershey does not provide any script for performing a transaction between a client device and a server that includes a plurality of transaction steps. Thus, Hershey also does not teach collecting data that is representative of a performance of the transaction steps of the script.

Moreover, Hershey does not teach reporting the collected data, wherein reporting the collected data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of the at least one local probe or the at least one remote probe. While Hershey states that parameter data may be output to the user via an output device, Hershey provides no details as to how such an output is provided. Specifically, Hershey does not teach that such an output comprises a report having a plurality of transaction step entries, one entry for each transaction step of a script that is used to program the probes, and associated performance data collected from the probes. The Final Office Action admits that Hershey does not teach these features (see Final Office Action, page 3, paragraph 9). However, the Final Office Action alleges that these features are taught by Chandra. Appellants respectfully disagree.

Chandra is directed to a mechanism for scheduled measurement of connections between end nodes. The end nodes are provided with test protocols that have test scripts. These test scripts are used to measure the performance of the connection between the end nodes without requiring any involvement of application software which may or may not be present on the end

nodes (column 3, lines 16-50). The system of Chandra may make measurements of the connection performance at scheduled times and may store this information until a request for a report is received, or an automatic scheduled report is performed. The reports are provided to a console node which generates statistics for the connection based on the measured performance.

Chandra is not concerned with measuring the performance of <u>transactional steps</u> of a script but rather merely the performance of the connection as a whole. Thus, Chandra does not teach or even suggest to measure the performance of individual transactional steps of a script and provide a report having entries for each of the individual transactional steps.

The only mention of "transactions" in Chandra is in the Background of the Invention section where Chandra discusses a known system management tool (see column 1, lines 54-66). As discussed in this Background section of Chandra, one known system management tool involves actively emulating application transactions. Agents at the end user locations monitor actual sample application transactions to measure performance of the application operating over the network environment. While Chandra teaches that such system management tools exist, Chandra takes an opposite approach by concerning itself with only the measurements of the connections between end nodes without requiring any involvement of application software which may or may not be present on the end nodes (see column 3, lines 20-23, "...without requiring any involvement of application software...", and column 3, lines 39-41, "...without regard to the end user application programs available at particular endpoints..."). While the Background in Chandra mentions using synthetic transactions to monitor performance of applications, the monitoring is done on a transaction level. There is no mention in Chandra of monitoring the performance of individual steps in the transactions or providing a report having entries for each transaction step of a transaction in a script.

Moreover, other than the above mentioned portion of the Background section in Chandra, the only other mention of transactions in Chandra is that the performance measure may include transaction rates. Thus, yet again, the performance measure is at a transaction level rather than at a level corresponding to individual transaction steps of a transaction. Hence, even if Chandra does perform measurements of connection performance with regard to transactions, the measurements are not done with regard to individual transaction steps such that a report having entries for each transaction step of a transaction in a script is provided. Thus, contrary to the allegations raised by the Final Office Action, Chandra actually does not teach or even suggest to

measure performance of transactional steps but instead to only measure the performance of a connection between end nodes, which at most may be performed on a transaction basis, not individual transaction steps.

The Final Office Action alleges that Chandra teaches the collection of data for reporting at column 8, lines 22-35, column 13, lines 10-11, column 16, line 20 to column 18, line 35, and column 3, lines 45-47. Column 8, lines 22-35 of Chandra teaches that the endpoint node pairs generate timing records and calculate performance test results from these timing records and provide these performance test results to a console node. The console node may then analyze the performance test results. Column 13, lines 10-11 of Chandra teaches that the results may be stored until an appropriate time for a batch or event driven reporting of results to the control node.

Column 16, line 20 to column 18, line 35 provides a number of tables describing connection analysis results and periodic report results. It is important to note that nowhere in these tables is there anything regarding providing a report that has entries for each transaction step of a transaction in a script. To the contrary, the only mention of transactions in these tables is the transaction count which is a count of a number of transactions. There are no entries in any of the "results" tables of Chandra regarding individual transaction steps of a transaction in a script.

Column 3, lines 45-47 of Chandra teaches that network test results may encompass an end-to-end view and may further break network performance analysis down into its components, such as client, server, application, and network time, to potentially quickly and accurately isolate problems. While this section talks about breaking down results into various parts of the network, i.e. client, server, application, etc., there is no teaching or even suggestion in this portion of Chandra regarding providing a report having entries for each of the transaction steps of a transaction in a script.

Thus, neither Hershey nor Chandra, either alone or in combination, teach or suggest that collected data is data representative of a performance of transaction steps of a transaction in a script executed by a plurality of probes. Moreover, neither Hershey nor Chandra, either alone or in combination, teach or suggest reporting the data, wherein by generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of at least one local probe or at least one

remote probe. Therefore, even if Hershey were combinable with Chandra, and one were somehow motivated to attempt such a combination, *arguendo*, the result of the combination still would not result in these features of independent claims 1, 30 and 45 being taught or suggested.

At least by virtue of their dependency on claims 1, 30, and 45, respectively, neither Hershey nor Chandra, either alone or in combination, teach or suggest the features of dependent claims 3-7, 9, 12, 16, 17, 19-21, 23, 26, 29, 32-36, 38, 41, 47-51, 53, and 56.

In response to the above arguments, the Examiner, in the Advisory Office Action mailed May 26, 2006 states:

The examiner has determined that the steps within a given test script, i.e. a connection within a set of connections, is functionally equivalent to a transaction as currently defined by the instant applications, as further indicated by the transaction count associated with the results of the test script as broken down into test components, i.e. per connection analysis. From this, it is clear that Chandra teaches the development and execution of a script composed of multiple steps, each step thus comprising a transaction, and further that Chandra teaches a breakdown of information by test script portion/transaction result (i.e. timing record per connection analysis) to the stored and/or reported, as shown in the Final Office Action.

Essentially the Examiner's response is that because Chandra teaches a test script, transaction counts, and the ability to break down results into components of a network, that this obviates the claimed invention. Appellants respectfully submit that the Examiner is reading in limitations of the claimed invention into the teachings of Chandra having first had benefit of Appellants' own disclosure.

Nonwhere in Chandra is there any teaching to break down performance measurements into individual transaction steps of a script. All that Chandra teaches is that network test results may encompass an end-to-end view and may further break network performance analysis down into its components, such as client, server, application, and network time, to potentially quickly and accurately isolate problems in the network (see column 3, lines 44-47). Thus, while performance measurements may be broken down into individual network components, there is no teaching or suggestion to correlate such performance measurements to individual transaction steps of a script or to generate a report having entries for individual transaction steps. From the performance measurements of Chandra, all that can be determined is where latencies in a

connection between two endpoints may be present and thus, a potential problem. It is not possible to determine in Chandra what the performance of individual transaction steps of a script is, let alone generate a report having individual transaction step entries with corresponding performance data collected from one or more of the at least one local probe or the at least one remote probe, as recited in claims 1, 30, and 45.

B. Rejection under 35 U.S.C. § 103(a) based on Hershey, Chandra and Schwaller

The Final Office Action rejects claims 2, 8, 10, 13, 15, 18, 22, 24, 27, 31, 37, 39, 42, 44, 46, 52, 54, 57, and 59 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hershey and Chandra, and further in view of Schwaller et al. (U.S. Patent No. 6,901,442). This rejection is respectfully traversed.

Claims 2, 8, 10, 13, 15, 18, 22, 24, 27, 31, 37, 39, 42, 44, 46, 52, 54, 57, and 59 are dependent claims that are dependent upon respective ones of independent claims 1, 30 and 45. Thus, at least by virtue of their dependency, these claims are not taught or suggested by the alleged combination of Hershey and Chandra for the reasons set forth above in section I. Moreover, Schwaller does not provide for the deficiencies noted above with regard to Hershey and Chandra.

Schwaller is directed to a mechanism for filtering of network performance data. Nowhere in Schwaller is there any teaching or suggestion to program a probe with a script that comprises a plurality of transaction steps for performing a transaction between a client device and a server device. Schwaller merely states that the data may be collected in response to active testing of the network or passive data collection (column 7, lines 55-65). Schwaller does not provide any teaching or even suggestion regarding a script such as that recited in independent claims 1, 30, and 45.

Furthermore, Schwaller does not teach or suggest a report such as that recited in claims 1, 30, and 45. Schwaller does show various outputs in Figures 9A-13. However, in none of these outputs is there any report such as that recited in claims 1, 30, and 45. That is, none of the outputs of Schwaller show a report that comprises a plurality of transaction step entries, one entry for each transaction step of a script, having associated performance data collected from one or

more of the at least one local probe or the at least one remote probe. To the contrary, the outputs generated by Schwaller may provide performance data for a plurality of applications (see Figure 9A of Schwaller), but there is no indication of any transaction steps of a script that is used to program a probe in any of the outputs of Schwaller.

In fact, there is no ability in Schwaller to match any of the data output by Schwaller to transaction steps of a script used to program a probe. Schwaller does provide an output of a distribution of response times for transactions (see Figure 10.C.1), however, there is no indication of the individual transaction steps for the transactions or the corresponding performance data for such transaction steps in any of the outputs provided by Schwaller, similar to Chandra discussed above. Thus, Schwaller, like Hershey and Chandra, does not teach or suggest the features of independent claims 1, 30, and 45. Since none of these references teach or suggest these features, any alleged combination of the references, even if such a combination were possible and one of ordinary skill in the art were somehow motivated to make such a combination, would not result in these features being taught or suggested.

In view of the above, Appellants respectfully submit that neither Hershey, Chandra, nor Schwaller, either alone or in combination, teach or suggest the features of independent claims 1, 30, and 45. At least by virtue of their dependency on claims 1, 30, and 45, respectively, neither Hershey, Chandra, nor Schwaller, either alone or in combination, teach or suggest the features of dependent claims 2, 8, 10, 13, 15, 18, 22, 24, 27, 31, 37, 39, 42, 44, 46, 52, 54, 57, and 59. Accordingly, Appellants respectfully request withdrawal of the rejection of claims 2, 8, 10, 13, 15, 18, 22, 24, 27, 31, 37, 39, 42, 44, 46, 52, 54, 57, and 59 under 35 U.S.C. § 103(a).

C. Rejection under 35 U.S.C. § 103(a) based on Hershey, Chandra, Schwaller, and Wlashin

The Final Office Action rejects claims 60-64 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hershey, Chandra, Schwaller, and further in view of Wlashin et al. (U.S. Patent no. 6,163,775). This rejection is respectfully traversed.

Claims 60-64 are dependent from respective ones of independent claims 1, 30, and 45. The deficiencies of Hershey, Chandra, and Schwaller with regard to claims 1, 30, and 45 have been discussed above. Wlashin does not provide for these deficiencies. Wlashin is cited as

allegedly teaching using tables to report data. Wlashin does not teach or suggest reports that have entries for a plurality of transaction steps of a transaction in a script that is provided to local and/or remote probes, as recited in claims 1, 30, and 45. Thus, even if Wlashin were combinable with the other references, the addition of Wlashin would not result in the features of the independent claims discussed above being taught or suggested.

In addition to the above, neither Hershey, Chandra, Schwaller, nor Wlashin, either alone or in combination, teach or suggest the specific features recited in claims 60-64. Nowhere in any of the references is there any teaching to output a report to a user, the output of the report comprising a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script. The Final Office Action alleges that Hershey teaches reporting results to a user, Chandra teaches a table report, and Wlashin teaches a method and system of utilizing tables to report data. The Final Office Action alleges that the other differences between the claimed subject matter and the cited references is found only in "non-functional data stored on the article of manufacture" which does not distinguish the claimed invention from the prior art in terms of patentability.

Appellants respectfully submit that the configuration of the output generated by the present invention as recited in claims 60-64 does impart functionality and thus, is not merely non-functional descriptive material as alleged by the Examiner. With the output generated in the manner set forth in claims 60-64, a clearly ordered series of transaction steps corresponding to the order in the script is displayed along with their corresponding performance information. From such an output, a user may follow the order of transaction steps to determine where in the chain of steps a problem or performance degradation may have occurred and may take appropriate action. If a user determines that the total time for the script to execute is unsatisfactory, the user may traverse each of the transaction steps in order to determine where the greatest degradation in performance is felt and what that affect may have been on later transaction steps further down in the chain of transaction steps. Thus, the configuration of the output as recited in claims 60-64 does impart functionality and is an important feature of the claimed invention as recited in claims 60-64 that is not taught or even suggested by the cited references because none of the cited references teach or even suggest the monitoring of performance on a transactional step basis. To the contrary, none of the tables or even displays of the cited references show any individual entries for transaction steps of a script, let alone an

ordered arrangement as set forth in claims 60-64. This is further evidence that the cited references do not, and are not capable of, generating a report that includes entries for each transaction step in a script. Thus, in addition to being dependent upon their respective independent claims, claims 60-64 recite additional features that are not taught or suggested by the alleged combination of references.

VIII. Conclusion

In view of the above, Appellants respectfully submit that the features of the pending claims are not taught or suggested by the Hershey, Chandra, Schwaller, or Wlashin, whether taken alone or in combination. Accordingly, Appellants request that the Board of Patent Appeals and Interferences overturn the rejections set forth in the Final Office Action.

Respectfully submitted,

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CLAIMS APPENDIX

1. A method for communicating performance information, said method comprising:

configuring a plurality of probes to execute a script for performing a transaction between a client computing device and a server computing device, wherein the script comprises a plurality of transaction steps for performing the transaction;

collecting data from the plurality of probes, including at least one local probe and at least one remote probe, wherein the collected data is data representative of a performance of the transaction steps of the script executed by the plurality of probes; and

reporting said data, wherein reporting said data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of the at least one local probe or the at least one remote probe.

2. The method of Claim 1, wherein said reporting further comprises:

reporting a first subset of said data that originates from said at least one local probe;

reporting a second subset of said data that originates from said at least one remote probe;

and

employing a similar reporting format for said first subset and said second subset; whereby comparison of said first subset and said second subset is facilitated.

3. The method of Claim 1, wherein said reporting further comprises outputting a plurality of items chosen from:

response time data;

	availability data;
	probe location;
	Internet service provider information;
	time of script execution;
	threshold values;
	service level agreement violations; and
	error messages.
4.	The method of Claim 1:
	further comprising comparing said data with at least one threshold value derived from a
service level agreement; and	
	wherein said reporting further comprises reporting results of said comparing.
5.	The method of Claim 1, further comprising providing an alert when said data indicates an
error.	
6.	The method of Claim 5, wherein said error is a measured response time value greater than
a corresponding threshold value.	
7.	The method of Claim 5, wherein said alert is provided via a system management
compu	ter.

- 8. The method of Claim 5, further comprising providing a clearing message when said error no longer is detected.
- 9. The method of Claim 1, wherein said reporting further comprises outputting in a special mode any measured response time value that is greater than the corresponding threshold value.
- 10. The method of Claim 9, wherein said outputting in a special mode further comprises outputting in a special color.
- 12. The method of Claim 1, wherein said reporting further comprises outputting in a special mode an indication of an application's lack of availability.
- 13. The method of Claim 12, wherein said outputting in a special mode further comprises outputting in a special color.
- 15. The method of Claim 1, wherein said reporting further comprises reporting results of each execution of the script by said plurality of probes.
- 16. A method for communicating performance information, said method comprising:

 configuring at least one probe to execute a script for performing a transaction between a

 client computing device and a server computing device, wherein the script comprises a plurality

 of transaction steps for performing the transaction;

receiving data from the at least one probe, wherein the collected data is data

representative of a performance of the transaction steps of the script executed by the at least one probe;

comparing said data with at least one threshold value derived from a service level agreement; and

reporting results of said comparing, wherein the reported results comprise a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from the at least one probe.

17. The method of Claim 16, further comprising:

performing said receiving, said comparing, and said reporting, for a plurality of probes, including at least one local probe and at least one remote probe.

18. The method of Claim 17, wherein said reporting further comprises:

reporting a first subset of said data that originates from said at least one local probe;

reporting a second subset of said data that originates from said at least one remote probe;

and

employing a similar reporting format for said first subset and said second subset; whereby comparison of said first subset and said second subset is facilitated.

19. The method of Claim 16, further comprising providing an alert when said data indicates an error.

- 20. The method of Claim 19, wherein said error is a measured response time value greater than the corresponding threshold value.
- 21. The method of Claim 19, wherein said alert is provided via a system management computer.
- 22. The method of Claim 19, further comprising providing a clearing message when said error no longer is detected.
- 23. The method of Claim 16, wherein said reporting further comprises outputting in a special mode any measured response time value that is greater than the corresponding threshold value.
- 24. The method of Claim 23, wherein said outputting in a special mode further comprises outputting in a special color.
- 26. A method for communicating performance information, said method comprising:

 configuring a plurality of probes to execute a script for performing a transaction between
 a client computing device and a server computing device, wherein the script comprises a plurality
 of transaction steps for performing the transaction;

receiving data from at least one probe, wherein the received data is data representative of a performance of the transaction steps of the script executed by the plurality of probes;

comparing said received data with at least one threshold value derived from a service level agreement;

reporting said received data, wherein reporting said received data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of the at least one local probe or the at least one remote probe; and

outputting in a special mode any measured response time value that is greater than the corresponding threshold value.

- 27. The method of Claim 26, wherein said outputting in a special mode further comprises outputting in a special color.
- 29. The method of Claim 26, further comprising:

 performing said receiving, said comparing, and said outputting, for a plurality of probes, including at least one local probe and at least one remote probe.
- 30. A system for communicating performance information, said system comprising:

 means for configuring a plurality of probes to execute a script for performing a

 transaction between a client computing device and a server computing device, wherein the script

 comprises a plurality of transaction steps for performing the transaction;

means for collecting data from the plurality of probes, including at least one local probe and at least one remote probe, wherein the collected data is data representative of a performance of the transaction steps of the script executed by the plurality of probes; and

means for reporting said data, wherein reporting said data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction_step of the

script, having associated performance data collected from one or more of the at least one local probe or the at least one remote probe.

31. The system of Claim 30, wherein said means for reporting further comprises:

means for reporting a first subset of said data that originates from said at least one local probe;

means for reporting a second subset of said data that originates from said at least one remote probe; and

means for employing a similar reporting format for said first subset and said second subset;

whereby comparison of said first subset and said second subset is facilitated.

32. The system of Claim 30, wherein said means for reporting further comprises means for outputting a plurality of items chosen from:

response time data;

availability data;

probe location;

Internet service provider information;

time of script execution;

threshold values;

service level agreement violations; and

error messages.

33. The system of Claim 30:

further comprising means for comparing said data with at least one threshold value derived from a service level agreement; and

wherein said means for reporting further comprises means for reporting results of said comparing.

- 34. The system of Claim 30, further comprising means for providing an alert when said data indicates an error.
- 35. The system of Claim 34, wherein said error is a measured response time value greater than a corresponding threshold value.
- 36. The system of Claim 34, wherein said alert is provided via a system management computer.
- 37. The system of Claim 34, further comprising means for providing a clearing message when said error no longer is detected.
- 38. The system of Claim 30, wherein said means for reporting further comprises means for outputting in a special mode any measured response time value that is greater than the corresponding threshold value.

39. The system of Claim 38, wherein said means for outputting in a special mode further comprises means for outputting in a special color.

41. The system of Claim 30, wherein said reporting further comprises means for outputting in a special mode an indication of an application's lack of availability.

42. The system of Claim 41, wherein said means for outputting in a special mode further comprises means for outputting in a special color.

44. The system of Claim 30, wherein said means for reporting further comprises means for reporting results of each execution of the script by said plurality of probes.

45. A computer-usable medium having computer-executable instructions for communicating performance information, said computer-executable instructions comprising:

means for configuring a plurality of probes to execute a script for performing a transaction between a client computing device and a server computing device, wherein the script comprises a plurality of transaction steps for performing the transaction;

means for collecting data from the plurality of probes, including at least one local probe and at least one remote probe, wherein the collected data is data representative of a performance of the transaction steps of the script executed by the plurality of probes; and

means for reporting said data, wherein reporting said data comprises generating a report that comprises a plurality of transaction step entries, one entry for each transaction step of the script, having associated performance data collected from one or more of the at least one local

probe or the at least one remote probe.

46. The computer-usable medium of Claim 45, wherein said means for reporting further comprises:

means for reporting a first subset of said data that originates from said at least one local probe;

means for reporting a second subset of said data that originates from said at least one remote probe; and

means for employing a similar reporting format for said first subset and said second subset;

whereby comparison of said first subset and said second subset is facilitated.

47. The computer-usable medium of Claim 45, wherein said means for reporting further comprises means for outputting a plurality of items chosen from:

response time data;
availability data;
probe location;
Internet service provider information;
time of script execution;
threshold values;
service level agreement violations; and

error messages.

48. The computer-usable medium of Claim 45:

further comprising means for comparing said data with at least one threshold value derived from a service level agreement; and

wherein said means for reporting further comprises means for reporting results of said comparing.

- 49. The computer-usable medium of Claim 45, further comprising means for providing an alert when said data indicates an error.
- 50. The computer-usable medium of Claim 49, wherein said error is a measured response time value greater than a corresponding threshold value.
- 51. The computer-usable medium of Claim 49, wherein said alert is provided via a system management computer.
- 52. The computer-usable medium of Claim 49, further comprising means for providing a clearing message when said error no longer is detected.
- 53. The computer-usable medium of Claim 45, wherein said means for reporting further comprises means for outputting in a special mode any measured response time value that is greater than the corresponding threshold value.

- 54. The computer-usable medium of Claim 53, wherein said means for outputting in a special mode further comprises means for outputting in a special color.
- 56. The computer-usable medium of Claim 45, wherein said reporting further comprises means for outputting in a special mode an indication of an application's lack of availability.
- 57. The computer-usable medium of Claim 56, wherein said means for outputting in a special mode further comprises means for outputting in a special color.
- 59. The computer-usable medium of Claim 45, wherein said means for reporting further comprises means for reporting results of each execution of the script by said plurality of probes.
- 60. The method of claim 15, further comprising:

outputting the report to a user, wherein the output of the report comprises a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script.

61. The method of claim 16, further comprising:

outputting the reported results to a user, wherein the output of the report comprises a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script.

62. The method of claim 26, further comprising:

outputting the report to a user, wherein the output of the report comprises a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script.

63. The system of claim 44, further comprising:

means for outputting the report to a user, wherein the output of the report comprises a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script.

64. The computer-usable medium of claim 59, further comprising:

outputting the report to a user, wherein the output of the report comprises a table having at least one row for each execution of the script and columns ordered according to an order of transaction steps in the script.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE